

## Mini-Size InGaAs Avalanche PHOTODIODE with Single-Mode Pigtail

### FEATURES

- 2 Data Rate up to 2.7 Gbps
- 2 0.9 A/W Typical Responsivity
- 2 Breakdown voltage: 40V Typical
- 2 Wide Wavelength Band: 1260 nm to 1620 nm
- 2 Case Operating Temperature: -40 to 85°C
- 2 Coaxial Module with 9/125 μm Single-Mode Fiber
- 2 Mini-size Package

### APPLICATIONS

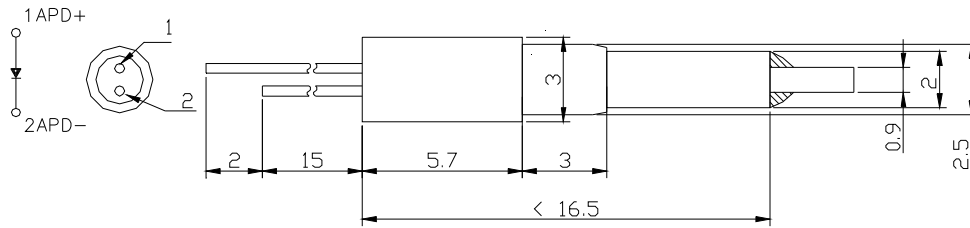
Receiver supports long distance fiber-optics communication systems with performance up to 2.7 Gb/s data rate, -40 to 85 °C operating temperature.

ELECTRICAL AND OPTICAL CHARACTERISTICS (Tc=25°C)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
	Detection Range	$\lambda$	1260	-	1620	nm
VBR	Breakdown Voltage	Idark=10μA	35		47	V
VOP	Operating Voltage	Best Sensitivity		VBR-3	VBR-2	V
dVBR/dT	Temperature Coefficient of Breakdown Voltage		0.06	0.07	0.10	V/°C
Idark	Dark Current	VR =0.9 VBR		80	100	nA
R	Responsivity	$\lambda=1550\text{nm}$ , M=1	0.85			A/W
C	Capacitance	VR =0.9 VBR, f=1MHz		0.5	0.8	pF
ORL	Optical Return Loss	Vop, $\lambda= 1550 \text{ nm}$	40			dB
BW	Bandwidth	RL=50 Ω, -3 dB, M=10	2.5	3		GHz

Absolute Maximum Ratings (Tc=25 °C)				
Symbol	Parameter	Minimum	Maximum	Unit
IF	APD Forward Current		2	mA
IR	APD Reverse Current		3	mA
VR	APD Reverse Voltage		VBR	V
Topr	Operating Temperature	-40	85	°C
Tstg	Storage Temperature	-40	85	°C

Stress in excess of the absolute Maximum Ratings may cause permanent damage to the device.

MECHANICAL DIMENSION (mm) and PIN ASSIGNMENT



- Note:** 1. Specifications subject to change without notice.  
 2. Other PIN assignment is available upon request.

### ORDER INFORMATION

Part No.: **A P D - 1 3 5 0 -**

Code	Fibre Buffer
0	900 $\mu$ m
1	250 $\mu$ m

Code	Connector Type
X	No Connector
L	LC/PC (for 900um fibre buffer only)
S	SC/PC (for 900um fibre buffer only)
F	FC/PC (for 900um fibre buffer only)
T	ST/PC (for 900um fibre buffer only)